

IN THE CLAIMS:

The present listing of the claims replaces all previous listings and versions of the claims.

1. (Currently Amended) A Internet access management system ~~system of reserving a connecting service to the Internet at a time period~~, comprising:

... a reservation table in which a state with regard to a reservation for a connecting service to the ~~internet~~ Internet at a time period is stored;

authentication server for receiving a first authentication including a user identification and password from a network communicator via an edge router and judging whether or not an entry in coincidence with said user identification and password exists within an authentication database, if there is a match, said authentication server sends a first authentication signal to said edge router, and if there is no match, said authentication server sends signal to said edge router instructing said edge router to not allow access to either an Internet or ISP LAN; [[and]]

a contract unit having a network management system, said contract unit receiving an ~~internet~~ Internet access request for a current time period from a user, if said authentication server sends the first authentication signal, said contract units judges [[judging]] whether said user reserved the current time period, by a prior reservation request stored in said reservation table, wherein if it is judged that said Internet access request is not permitted,

wherein if said contract unit judges that no prior reservation request had been made, the contract unit automatically directs said network management system to reroute the user to an ISP LAN using by issuing commands to [[an]] the edge router that limit user access to said ISP LAN only, such that a reservation request can be made by the user via a web server on said ISP LAN, said reservation request is made by issuing a second authentication, and if said second authentication is successful, the user has access to reservation services, said user issues a

reservation request for the current time period, upon receipt of the reservation request, said contract unit locks said reservation table preventing any other access to said reservation table, said contract unit permits said reservation request when the number of users connecting to the internet at a same time as said time period included in said reservation request is smaller than or equal to a predetermined value, once said reservation request has been accepted, the user issue a second Internet access request;

wherein if said contract unit judges that a prior reservation request had been made, contract unit directs said network management system to route the user to the Internet, sets a timer equal to the reservation time, and when said timer elapse, the contract unit directs said network management system to command the edge router to stop routing the user to the Internet and reroute the user to the ISP LAN to make another reservation.

2. (Cancelled)

3. (Original) The system of reserving a connecting service to the internet at a time period according to Claim 1, further comprising:

a discount data storing unit storing a discount data to determine an accounting fee for said connecting service for a time period, and

wherein said contract unit finds out a discountable time period with respect to said accounting fee of said connecting service with reference to said reservation table and said discount data to give a user a discount frame data showing said discountable time period and said accounting fee of said discountable time period.

4. (Previously Presented) The system of reserving a connecting service to the internet at a time period according to Claim 3, wherein said accounting fee is determined based on a remaining period before a starting time of a time period at which said user wants said connecting service to the internet, as said discount data.

5. (Previously Presented) The system of reserving a connecting service to the internet at a time period according to Claim 3, wherein said accounting fee is determined based upon a utilization level of a time period for said reservation, as said discount data.

6. (Original) The system of reserving a connecting service to the internet at a time period according to Claim 3, wherein said accounting fee is determined based on a condition of a day of a time period at which said user wants said connecting service to the internet, of the week, as said discount data.

7. (Original) The system of reserving a connecting service to the internet at a time period according to Claim 4, wherein said accounting fee is determined such that a discount rate of said accounting fee is defined as being higher, the shorter the remaining period and the smaller the number of said reservations.

8. (Original) The system of reserving a connecting service to the internet at a time period according to Claim 1, further comprising:

a penalty data storing unit storing a penalty data to determine a penalty if said user cancels said reservations, and

wherein said contract unit gives said user a penalty information showing said penalty based on said penalty data.

9. (Original) The system of reserving a connecting service to the internet at a time period according to Claim 8, wherein said penalty is determined based on a remaining period until a starting time of a time period, included in said permitted reserving demand, at which said user wants said connecting service to the internet, as said penalty data.

10. (Currently Amended) A network management method ~~of reserving a connecting service to the internet at a time period~~, comprising:

- receiving an Internet access request from a user for a current time period;
- authenticating said user based upon a user identification and password;
- investigating a reservation state of the current time period from a reservation table, only if said authenticating is successful;
- judging whether said current time period has been reserved based upon said investigation;
- determining if a reservation corresponds to said user by matching an user ID corresponding with said user with a identification key on said reservation table; and
- if said reservation does not match the user
- rerouting the user by issuing commands to an edge router that limit user access to said ISP LAN only, such that a reservation request can be made by the user via a web server on said ISP LAN;
- issuing a second authentication, and if said second authentication is successful, granting access to reservation services;
- issuing a reservation request for the current time period;
- locking said reservation services to others to prevent others from issuing a different reservation request; and

determining whether said reservation request is permitted; said reservation request is permitted when the number of users connecting to the internet at a same time as said time period including said reservation request is smaller than or equal to a predetermined value;
if there is a match,
commanding a network management system to route the user to the Internet;
setting a timer equal to a reservation time,
commanding an edge router to stop routing the user to the Internet when said timer elapse, and
rerouting the user to the ISP LAN to make another reservation when said timer elapse

11. (Cancelled)

12. (Original) The method of reserving a connecting service to the internet at a time period according 10, further comprising:

storing a discount data to determine an accounting fee for said connecting service for a time period;

finding out a discountable time period with respect to said accounting fee of said connecting service based on said reservation data and said discount data; and

giving a user a discount frame data showing said discountable time period and said accounting fee of said discountable time period.

13. (Original) The method of reserving a connecting service to the internet at a time period according to Claim 12, wherein said accounting fee is determined based on a remaining period until a starting time of a time period at which said user wants said connecting service to the internet, as said discount data.

14. (Original) The method of reserving a connecting service to the internet at a time period according to Claim 12, wherein said accounting fee is determined based on said state of said reservation, as said discount data.

15. (Original) The method of reserving a connecting service to the internet at a time period according to Claim 12, wherein said accounting fee is determined based on a condition of a day of a time period at which said user wants said connecting service to the internet, of the week, as said discount data.

16. (Original) The method of reserving a connecting service to the internet at a time period according to Claim 13, wherein said accounting fee is determined such that a discount rate of said accounting fee is defined as being higher, the shorter the remaining period and the smaller the number of said reservations.

17. (Original) The method of reserving a connecting service to the internet at a time period according to Claim 10, further comprising:

storing a penalty data to determine a penalty if said user cancels said reservations; and
giving said user a penalty information showing said penalty based on said penalty data.

18. (Original) The method of reserving a connecting service to the internet at a time period according to Claim 17, wherein said penalty is determined based on a remaining period until a starting time of a time period, included in said permitted reserving demand, at which said user wants said connecting service to the internet, as said penalty data.

19. (Currently Amended) A contract server used in an Internet management system to reserve a connecting service to the internet at a time period, comprising:

a judging unit having a network management system, said judging unit for receiving an Internet access request for a current time period from a user and judging whether said user

reserved the current time period, by a prior reservation request, stored in a [[said]] reservation table, ~~wherein if it is judged that said Internet access request is not permitted,~~ wherein if the judging unit judges that no prior reservation request had been made, the judging ~~contract~~ unit automatically reroutes the user by issuing commands to an edge router that limit user access to said ISP LAN only, such that a reservation request can be made by the user via a web server on said ISP LAN said reservation request is made by issuing a second authentication, and if said second authentication is successful, the user has access to reservation services, said user issues a reservation request for the current time period, upon receipt of the reservation request, said judging unit locks said reservation table preventing any other access to said reservation table, said judging unit permits said reservation request when the number of users connecting to the internet at a same time as said time period included in said reservation request is smaller than or equal to a predetermined value, once said reservation request has been accepted, the user issue a second Internet access request;

wherein if the judging unit judges that a prior reservation request had been made, judging unit directs said network management system to route the user to the Internet, sets a timer equal to the reservation time, and when said timer elapse, the judging unit directs said network management system to command the edge router to stop routing the user to the Internet and reroute the user to the ISP LAN to make another reservation; and

an input unit inputting the reservation request to reserve a connecting service to the internet at a certain time period from the user.

20. (Cancelled)